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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
TORRES, JOSEPH D	

ART UNIT	PAPER NUMBER
2133	

DATE MAILED: 12/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/030,207	MATE ET AL.	
	Examiner	Art Unit	
	Joseph D. Torres	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/31/2001*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 23-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "at least partially indicative" in claim claims 23 and 35 is a relative term which renders the claim indefinite. The term "at least partially indicative" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The Examiner asserts that a number is either indicative or not indicative of the spacing. The Examiner assumes that the Applicant just means -- indicative-- in place of "at least partially indicative". Furthermore any value used to generate an indication is still an indication by definition; hence the Examiner does not see how the term "at least partially indicative" distinguishes itself from the term – indicative--.

Claim Objections

2. Applicant is advised that should claim 32 found allowable, claim 33 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two

claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 23-29 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Khan; Farooq et al. (US 6367045 B1, hereafter referred to as Khan).

35 U.S.C. 102(e) rejection of claim 23.

Figure 11B in Khan teaches a data unit comprising a header and a corresponding bitmap subsequence located in a bitmap 1114. The header comprises a Sequence step size SNS_i, start serial number SSN_i, status bit E_i indicating whether a bitmap follows and a number L_i indicating the length of the corresponding bitmap subsequence in Bitmap 1114.

Note: a data bock is a datagram.

Khan teaches a status bit indicative of the status of the data unit (status bit E_i indicating whether a bitmap follows is a status bit indicative of the status of the i^{th} data unit); and a plurality of spacing bits together forming a binary representation of a number at least partially indicative of the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram (Data blocks 1 and 8 corresponding to data unit 1 in Figure 11B are indicated as incorrectly received, hence; Sequence step size SNS_i, start serial number SSN_i and number L_i indicating the length of the corresponding bitmap together with the respective bitmap are spacing bits giving a clear indication of the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram).

35 U.S.C. 102(e) rejection of claim 24.

Figure 11B in Khan teaches a plurality of data units, each data unit comprising a header and a corresponding bitmap subsequence located in a bitmap 1114. The header comprises a Sequence step size SNS_i, start serial number SSN_i, status bit E_i indicating whether a bitmap follows and a number L_i indicating the length of the corresponding bitmap subsequence in Bitmap 1114.

35 U.S.C. 102(e) rejection of claim 25.

Status bit E_i in Figure 11B in Khan indicates whether a bitmap follows is a status bit indicative of the status of the i^{th} data unit. Sequence step size SNS_i, start serial number SSN_i and number L_i indicating the length of the corresponding bitmap together with the

respective bitmap are spacing bits giving a clear indication of the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram.

35 U.S.C. 102(e) rejection of claims 26 and 27.

When $SNS_i = 1$ in Figure 9 in Khan, consecutive 0's entered into the i^{th} bitmap subsequence are indicative of incorrectly received blocks.

35 U.S.C. 102(e) rejection of claim 28.

Note: a data bock in Khan is a datagram.

35 U.S.C. 102(e) rejection of claim 29.

Figure 11B in Khan teaches a data unit comprising a header and a corresponding bitmap subsequence located in a bitmap 1114. The header comprises a Sequence step size SNS_i, start serial number SSN_i, status bit E_i indicating whether a bitmap follows and a number L_i indicating the length of the corresponding bitmap subsequence in Bitmap 1114.

35 U.S.C. 102(e) rejection of 31.

The Abstract in Khan teaches that the invention in Khan is an acknowledgment protocol for a communication system.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Khan; Farooq et al. (US 6367045 B1, hereafter referred to as Khan).

35 U.S.C. 103(a) rejection of claim 30.

Khan substantially teaches the claimed invention described in claim 23-29 (as rejected above).

However Khan does not explicitly teach the specific use of 4-bit datagrams.

The Examiner asserts that one of ordinary skill in the art at the time the invention was made would have recognized that the teachings in Khan encompass any size block datagram and modifying the block size is an obvious modification of the teachings in Khan to satisfy a particular communication protocol.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Khan by including use of 4-bit datagrams. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized the teachings of Khan would have provided an integrity mechanism for data transmitted using 4-bit datagrams.

5. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khan; Farooq et al. (US 6367045 B1, hereafter referred to as Khan) in view of Johansson; Mathias et al. (US 6643813 B1, hereafter referred to as Johansson).

35 U.S.C. 103(a) rejection of claims 32-34.

Khan substantially teaches the claimed invention described in claim 23-31 (as rejected above).

However Khan does not explicitly teach the specific use of an ARQ protocol in a W-CDMA radio link protocol.

Johansson, in an analogous art, teaches use of an ARQ protocol in a W-CDMA radio link protocol (col. 2, lines 21-30 in Johansson).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Khan with the teachings of Johansson by including use of an ARQ protocol in a W-CDMA radio link protocol. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because

one of ordinary skill in the art would have recognized that the teachings of Khan would have provided an integrity mechanism for a W-CDMA radio link protocol.

6. Claims 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khan; Farooq et al. (US 6367045 B1, hereafter referred to as Khan) in view of Ejzak; Richard P. et al. (US 5444718 A, hereafter referred to as Ejzak).

35 U.S.C. 103(a) rejection of claim 35.

Figure 11B in Khan teaches a data unit comprising a header and a corresponding bitmap subsequence located in a bitmap 1114. The header comprises a Sequence step size SNS_i, start serial number SSN_i, status bit E_i indicating whether a bitmap follows and a number L_i indicating the length of the corresponding bitmap subsequence in Bitmap 1114.

Note: a data bock is a datagram.

Khan teaches a status bit indicative of the status of the data unit (status bit E_i indicating whether a bitmap follows is a status bit indicative of the status of the i^{th} data unit); and a plurality of spacing bits together forming a binary representation of a number at least partially indicative of the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram (Data blocks 1 and 8 corresponding to data unit 1 in Figure 11B are indicated as incorrectly received, hence; Sequence step size SNS_i, start serial number SSN_i and number L_i indicating the length of the corresponding bitmap together with the respective bitmap are spacing bits giving a clear indication of

the spacing between one incorrectly received datagram and a succeeding incorrectly received datagram).

However Khan does not explicitly teach the specific use of a datagram checking unit or and acknowledgment generator even though such elements are required to make the invention in Khan functional.

Ejzak, in an analogous art, teaches use of a datagram checking unit or and acknowledgment generator (col. 2, lines 34-39 and Figure 2 in Ejzak).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Khan with the teachings of Ejzak by including use of a datagram checking unit or and acknowledgment generator. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of a datagram checking unit or and acknowledgment generator even though such elements are required to make the invention in Khan functional.

35 U.S.C. 103(a) rejection of claim 36.

Figure 2 in Ejzak.

35 U.S.C. 103(a) rejection of claim 37.

Memory 215 in Figure 2 of Ejzak.

35 U.S.C. 103(a) rejection of claim 38.

Col. 3, lines 1-4 in Ejzak teach the use of CRC codes which are standard check codes.

35 U.S.C. 103(a) rejection of claim 39.

Khan and Ejzak substantially teaches the claimed invention described in claim 23-29 (as rejected above).

However Khan and Ejzak does not explicitly teach the specific use of 4-bit datagrams.

The Examiner asserts that one of ordinary skill in the art at the time the invention was made would have recognized that the teachings in Khan encompass any size block datagram and modifying the block size is an obvious modification of the teachings in Khan to satisfy a particular communication protocol.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Khan and Ejzak by including use of 4-bit datagrams. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized the teachings of Khan would have provided an integrity mechanism for data transmitted using 4-bit datagrams.

35 U.S.C. 103(a) rejection of claim 40.

Figure 2 of Ejzak.

7. Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khan; Farooq et al. (US 6367045 B1, hereafter referred to as Khan) in view of Wiedeman; Robert A. et al. (US 5448623 A, hereafter referred to as Wiedeman).

35 U.S.C. 103(a) rejection of claims 41 and 42.

Khan substantially teaches the claimed invention described in claim 23-31 (as rejected above).

However Khan does not explicitly teach the specific use of cellular radio terminals.

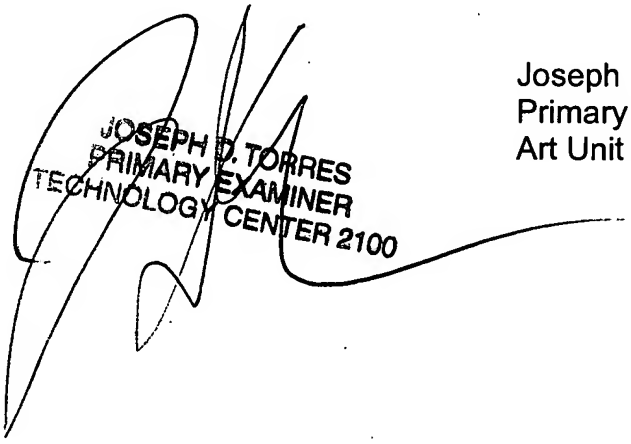
Wiedeman, in an analogous art, teaches use of cellular radio terminals (col. 1, lines 21-45 in Wiedeman).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Khan with the teachings of Wiedeman by including use of cellular radio terminals. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that the teachings of Khan would have provided an integrity mechanism for cellular radio terminals.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Joseph D. Torres, PhD
Primary Examiner
Art Unit 2133